

PATENT
Attorney Docket No.: 396542
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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Patentee:	John B. Taylor	Examiner:	unknown
Patent No.	5,997,910	Group Art Unit:	unknown
Issued:	December 7, 1999	Filed:	July 2, 1998
For:	Plant Fertilizer Compositions Containing Phosphonate and Phosphate Salts and Derivatives Thereof		

REISSUE APPLICATION
PRELIMINARY AMENDMENT

Box: REISSUE
Commissioner For Patents
Washington, DC 20231

Sir:

Please amend the above-identified application as follows and consider the following remarks.

CERTIFICATE UNDER 37 C.F.R. § 1.8 and § 1.10

I hereby certify that, on the date shown below, this correspondence is being

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946181.1

In the Specification

Please amend the following paragraphs of the specification:

Column 3, lines 50-52:

The composition preferably comprises an aqueous solution wherein each salt is present in solution from about 20 [millimole] millimolar to about 5 % vol./vol.

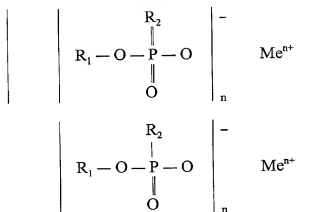
Column 4, lines 48-52:

C. $\text{KH}_2\text{PO}_4/\text{K}_2\text{HPO}_4$ Solution. Varying amounts of each compound (K_2HPO_4 ; KH_2PO_4 ; K_2HPO_4 ; or KH_2PO_4) in aqueous solution are combined at rates ranging from 20 [millimole] millimolar to 5% vol./vol., depending on crop host and the pathogen complex and level of infection.

Column 8, lines 21-35:

It will also be appreciated that compositions for controlling Phycomycete and Ascomycete fungi diseases in plants may also contain phosphate and phosphonate compounds comprising a fungicidally effective amount of at least a first salt having the following formula:

effective amount of at least a first salt having the following formula:



Column 8, lines 45-57:

Where R_1 is selected from the group consisting of H, K, an alkyl radical containing from 1 to 4 carbon atoms, halogen-substituted alkyl or nitro-substituted alkyl radical, an alkenyl, halogen-substituted alkenyl, [alkinyl] alkynyl, halogen-substituted [alkinyl] alkynyl; alkoxy-substituted alkyl radical, and ammonium substituted by alkyl or hydroxy alkyl radicals;

R_2 and R_3 are selected from the group consisting of H and K;

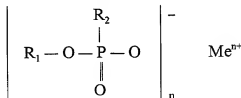
Me is selected from the group consisting of K, alkaline earth metal cations, aluminum atom, and ammonium cation; and

n is a whole number from 1 to 3, equal to the valence of Me.

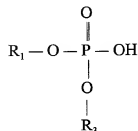
In the Claims

Please amend claim 1 as follows:

1. (Once amended) A composition for fertilizing comprising [:] enhanced growth stimulating amounts of at least a first salt having the following formula:



and a second salt having the following formula:



where R_1 is selected from the group consisting of H, K, an alkyl radical containing from 1 to 4 carbon atoms, halogen-substituted alkyl or nitro-substituted alkyl radical, an alkenyl, halogen-substituted alkenyl, [alkinyl] alkynyl, halogen-substituted [alkinyl] alkynyl; alkoxy-substituted alkyl radical, and ammonium substituted by alkyl or hydroxy alkyl radicals;

R_2 and R_3 are selected from the group consisting of H and K;

Me is selected from the group consisting of K, alkaline earth metal cations, aluminum atom, and ammonium cation; and

n is a whole number from 1 to 3, equal to the valence of Me,

wherein said composition comprises an aqueous solution, each said first and second salt being present in solution from about 0.25% vol./vol. to about 5% vol./vol.

Please add the following new claims:

3. A method of stimulating growth and controlling fungus disease in plants comprising applying to the plants in growth stimulating effective amounts a composition comprising:

(a) an aqueous solution of H_3PO_3 and KOH, and

(b) an aqueous solution of monopotassium phosphate and KOH.

4. The method according to claim 3, wherein said composition comprises an aqueous solution

wherein the amount of potassium phosphonate in said aqueous solution (a) and the amount of potassium phosphate in said aqueous solution (b) is each present in said composition in an amount from about 0.25 % vol./vol. to about 5 % vol./vol..

5. The method according to claim 3, wherein said composition comprises an aqueous solution

wherein the amount of potassium phosphonate prepared from solution (a) in said composition is one part by weight and the amount of potassium phosphate prepared from solution (b) in said composition is between 0.001 and 1,000 parts by weight.

6. A method of stimulating growth and controlling fungus disease in plants comprising applying to the plants in growth stimulating effective amounts a composition prepared by mixing:

(a) an aqueous solution of H_3PO_4 and KOH, and

(b) an aqueous solution of monopotassium phosphate and KOH.

7. The method according to claim 6, wherein said composition comprises an aqueous solution

wherein the amount of potassium phosphonate in said aqueous solution (a) and the amount of potassium phosphate in said aqueous solution (b) is each present in said composition in an amount from about 0.25 % vol./vol. to about 5 % vol./vol..

8. The method according to claim 6, wherein said composition comprises an aqueous solution

wherein the amount of potassium phosphonate prepared from solution (a) in said composition is one part by weight and the amount of potassium phosphate prepared from solution (b) in said composition is between 0.001 and 1,000 parts by weight.

9. A method of stimulating growth and controlling fungus disease in plants comprising applying to the plants in growth stimulating effective amounts a composition comprising:

(a) an aqueous solution of H_3PO_4 and KOH, and

(b) an aqueous solution of dipotassium phosphate.

10. The method according to claim 9, wherein said composition comprises an aqueous solution wherein the amount of potassium phosphonate in said aqueous solution (a) and the amount of dipotassium phosphate in said aqueous solution (b) is each present in said composition in an amount from about 0.25 % vol./vol. to about 5 % vol./vol..

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11. The method according to claim 9, wherein said composition comprises an aqueous solution wherein the amount of potassium phosphonate prepared from solution (a) in said composition is one part by weight and the amount of dipotassium phosphate in solution (b) in said composition is between 0.001 and 1,000 parts by weight.

12. A method of stimulating growth and controlling fungus disease in plants comprising applying to the plants in enhanced fungicidally effective amounts a composition prepared by mixing:

- (a) an aqueous solution of H_2PO_4 and KOH, and
- (b) an aqueous solution of dipotassium phosphate.

13. The method according to claim 12, wherein said composition comprises an aqueous solution wherein the amount of potassium phosphonate in said aqueous solution (a) and the amount of dipotassium phosphate in said aqueous solution (b) is each present in said composition in an amount from about 0.25 % vol./vol. to about 5 % vol./vol..

14. The method according to claim 12, wherein said composition comprises an aqueous solution wherein the amount of potassium phosphonate prepared from solution (a) in said composition is one part by weight and the amount of dipotassium phosphate in solution (b) in said composition is between 0.001 and 1,000 parts by weight.

Remarks

The specification at column 8, lines 45-57 and claim 1 have been amended to correct an obvious typographical error in the spelling of “alkinyl” by amending to “alkynyl”. Applicant respectfully submits that any person of ordinary skill in the art would know that “alkynyl” was intended by Applicant.

New claims 3-14 have been added because patentee did not claim all that he had the right to claim in the patent. New claims 3-14 claim the method of the invention in an alternative fashion. New claims 3-14 find support in the specification at col. 1, lines 30-36, col. 3, line 61 - col. 4, line 9, col. 4, lines 27-52, and col. 10, lines 36-39 and 48-50. No new matter is added in claims 3-14.

The specification at column 3, lines 50-52, and column 4, lines 48-52 specify a concentration range of “about 20 millimole to about 5% vol./vol.” for the claimed phosphonates and phosphates in the compositions of the invention. Applicant respectfully submits that “millimole” was intended to be “millimolar” as “millimolar” is a unit of concentration while “millimole” is not. Applicant further respectfully submits that any person of ordinary skill in the art would know that a unit of concentration was intended by Applicant. Therefore, Applicant respectfully submits that a correctable transcription error was made and that correction of “millimole” to “millimolar” is necessary for both units in the range to be units of concentration.

The formula in the specification at column 8, lines 21-35 has been amended to correct an obvious typographical error in the formula. Applicant respectfully submits that the formula contains an obvious typographical error in that the bond between P and R² has to be a single bond rather than a double bond as shown. Furthermore, the formula at column 10, lines 5-10 supports the amendment to the formula at column 8, lines 21-35.

Claims 1-14 are currently in the reissue application for examination.

It is respectfully submitted that claims 1-14 are patentable. As such, it is respectfully requested that claims 1-14 be found allowable.

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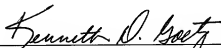
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Should the Examiner believe that issues remain outstanding, the Examiner is respectfully requested to call Applicants' undersigned attorney in an effort to resolve such issues and advance this application to issue.

Respectfully submitted,

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